

# 2012 Scheme

Q.P.Code: 207015

Reg. No.:.....

## Second Year BASLP Degree Supplementary Examinations

March 2020

### Statistics and Research Methods & Epidemiology in Speech and Hearing

Time : 3 hrs

Max marks : 80

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers

Essay:

(4x10=40)

1. Explain the various measures of central tendency. What are the requisites of a good measure of central tendency.
2. Explain the properties of normal distribution. The scores obtained by students in a test are normally distributed with mean 400 and standard deviation 100. What percentage of students receive scores between 300 and 500. Given  $P(0 < Z < 1) = 0.3413$
3. Define correlation and discuss various types of correlation with the help of scatter diagram. Calculate Spearman's rank correlation for the following data:

Marks in audiology	82	55	60	36	80	25	90	35
Marks in speech pathology	72	26	34	28	50	24	68	44

4. Explain briefly about the incidence and prevalence of hearing loss in adults and geriatrics.

Short notes

(5x5=25)

5. Probability sampling methods
6. Scales of measurement
7. Group designs
8. Measures of dispersion
9. Need for epidemiological studies

Answer briefly

(5x3=15)

10. Students t-test
11. Sampling error and non-sampling error
12. Region of acceptance and region of rejection
13. Skewness and kurtosis
14. Simple random sampling

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